# CINTACS



Newsletter of the Cincinnati Section of the American Chemical Society

April, 2006 Vol. 43, No. 7

#### **Meeting Calendar**

April 20 Howard and Sally Peters Oesper H.S. Awards at Northern Kentucky U.

May 19 Party Night
River Boat Cruise on the
Mark Twain (boarding begins at 6:30 PM)

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#### **April Monthly Meeting**

Chocolate—Food of the Gods

#### **Howard and Sally Peters**

#### **Abstract**

Chocolate has been a part of world culture for thousands of years. This talk will present :

- 1. The high points of the history of chocolate from the Mayan and Aztec cultures to the present;
- 2. Some chemistry and biochemistry of theobroma cocoa (the food of the Gods);
- 3. Some health results that indicate that this exotic vegetable (obviously since wine is a fruit) is actually good for you;
- 4. Some circulating urban legends (little known facts, trivia) about chocolate;
- Discussions about the recent books "The Emperors of Chocolate"; and
- 6. Samples sufficient to make some attendees sick.

Some of us are not ashamed to admit to being card-carrying chocoholics and on a 12-step plan.

#### **About the Speakers**

Howard Peters is a 1962 chemistry graduate of Geneva (Continued on page 4)

# Campbell and Gorey Win Teacher of the Year Awards!

[See articles on page 5]



#### THE CINTACS NEWSLETTER

#### Vol. 43, No. 7 April, 2006

Editor.....Bruce S. Ault Advertising.....Ed Hunter

CINTACS is published eight times a year (September through May) by the Cincinnati Section of the American Chemical Society. The submission deadline will be approximately August 1 for the September, 2006 issue. Electronic submission is strongly preferred. All materials should be sent to:

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#### From the Chair

The April meeting is dedicated to recognizing outstanding achievement by K-12 students and teachers, with families and teachers of the students attending as invited guests at Northern Kentucky University. We have a terrific duo, Drs. Howard and Sally Peters offering us "Chocolate - The Food of Gods", a topic of high interest for all chocolate lovers, most probably all of us who will be there.

This is one meeting that involves the most work. The Awards Committee chaired by Jim Hershberger is responsible for selecting the recipients of the Teacher of the Year for Elementary and Middle Schools (since 1996) and High School (since 1990). Chemistry Olympiad and Oesper Awards Committee chaired by John Williams determines the recipients of Oesper High School Awards at two levels (since 1967) through two different exams and the top achievers in the Chemistry Olympiad qualifying exam (since 1985). NCW Poster Competition Committee chaired by Richard Sunberg selects the winners at four different levels, K - 2nd grade, 3rd - 4th grade, 5th - 8th grade, and 9th - 12th grade and recognizes their teachers (since 1986). We have the greatest appreciation for the three chairs who have been the driving force for the success of these awards programs over the years. Our thanks go to Jim Niewahner for continuing to arrange the meeting at NKU. We are grateful to the Girindus America, Inc. for their sponsorship of this meeting.

April meeting is also the time for recognizing members who have achieved fifty years of service. Congratulations to Mr. John B. Crawford and Mr. William Donald Kelley.

Please remember successful meetings need membership support; "do come to the meetings and every time ask a different person, colleague, co-worker, friend or student to come with you".

We have one more meeting for the 2005-2006 Program, the May Party Night. A Riverboat Cruise on Friday, May 19 sponsored by the YourEncore, Inc.; get ready it is going to be a real party.

Lastly, now that the 2005 Annual Report has been submitted to the ACS, it will also be posted on our website by the time you receive this newsletter, check it out, you will see that we continue to be a great section with strong support by and of the membership.

Emel Yakali

**Support CINTACS Advertisers!** 

#### April Monthly Meeting Thursday, April 20, 2006 Northern Kentucky University

#### Sponsored by Girindus America, Inc.

# Featured Speakers Drs. Howard and Sally Peters

#### **Program**

5:00 pm Board Meeting: University Center 108

5:30 Registration: University Center, Second Floor Lobby Area

6:00 Banquet, University Center Ballroom, \$15.00

Herb Chicken, Beef Tips with Brown Gravy

Spinach Salad, Rice Pilaf, California Blend Vegetables Rolls, Iced Tea, Coffee, and Chef's Choice Dessert

Quiche is available on special request. Please ask for this when you make your reservation.

7:00 Keynote Speakers: Drs. Howard and Sally Peters

"Chocolate, Food of the Gods" University Center Ballroom

8:00 Awards Presentation

University Center Ballroom

#### Reservations: The deadline for reservations is Monday April 17, 2006

- The meeting reservation form is online at http://www.che.uc.edu/acs/cinacs.html. This is the best and easiest way to register.
- As a last resort, you may send your reservations by email to kim.carey@uc.edu.
- If it is impossible to make your reservation via the internet, call 513-556-0293; leave name, affiliation, phone number, and choice, and price category, if half-price.

**Directions:** From Downtown, or Cincinnati suburbs, take I-71 or I-75 or I-275 to I-471 South. Approximately six miles from the Downtown Cincinnati, I-471 ends as it merges with US27 at the first light. From northern Kentucky take I-75 to I-275 East to the Alexandria/US27 exit (this is past the NKU exit); continue on I-471 to US27 at the first light. At the second stop light turn right onto Nunn Drive, the entrance to Northern Kentucky University. Guests may park in any unreserved parking space. (Do not park in Lot N as it is all reserved). Guests must have a handicapped parking sticker in order to park in a space for the handicapped. Although you may park in any lot, your best options for parking are in one of the two garages: 1) From Nunn Drive turn left at the first traffic light onto University Drive. A parking garage is on the right; parking fee is \$2. This is the closest parking to the University Center. 2) From Nunn Drive, at the first traffic light turn right at University Drive and then left onto Kenton Drive. A free parking garage is on the right. The pay garage is structure "U"; the free garage is located at "14" which had been the soccer field. Due to construction on campus, traffic in and out of campus can be very heavy at times and it is recommended that you plan extra time for parking. A campus map can be found at <a href="http://library.nku.edu/map/campus.html">http://library.nku.edu/map/campus.html</a>.



(Continued from page 1)

College in Beaver Falls, PA. He earned a Ph.D. in organic chemistry at Stanford University in 1967 under Dr. Harry S. Mosher. After several years in chemical research at Dow Chemical Company in Midland, Michigan and SRI in Menlo Park, CA, he completed his legal studies at night at Santa Clara University in 1978. He was a patent attorney with Syntex Corporation in Palo Alto, CA and for the past 18 years has been a partner in his own patent law firms in San Francisco and Palo Alto. He is a former chair of the Santa Clara Section (1986 and 1996) and is currently a Director-at-Large on the Board of Directors of the ACS. He has received the Ottenberg and Radding Awards from the Santa Clara Section and the Roger Middlekauf Service Award of the Division of Chemistry and the Law.

Sally Peters is a 1964 graduate of Geneva College and performed biochemical research for Dr. Hubert Loring at Stanford University in 1964-65. She earned a MLS degree in library science from San Jose State University in 1983. She has been a chemical information specialist at the Information Center at PARC Incorporated in Palo Alto for the

past 20 years. She was the Chair of the Santa Clara Section in 2001 and is currently a councilor for the Section. She received the Geneva College Alumni Service Award in 1997 and the Santa Clara Section's Ottenberg Award in 2001.

The Peters family includes Theresa Peters, a high school biology teacher in Pasadena, CA and Elizabeth Peters Bhatt, a biotech/business type with Eli Lilly in Indianapolis, IN. The two granddaughters in Indianapolis, Kayleigh and Megan, have 125 years of ACS members in their grandparents; the other grandfather Raj Bhatt is a biochemist and 46 year member of the ACS.

Visit the Section's Home Page

http://www.che.uc.edu/acs

#### 2006 Middle School Teacher of the Year

The Awards Committee is pleased to announce that Mark H. Campbell is the ACS Cincinnati Section's Middle School Science Teacher of the Year. Mark has been teaching since 1997. He joined the faculty at Mason Middle School in 2002. Mark brings a high level of energy to his school. A pleased parent reports "One of Mr. Campbell's finest quali-



ties as a teacher is the excitement he incites from his students. A few of his class projects include: a chlorinated drinking water study, Acid Base experiments, and his year long ESA (Environmental Study Area)....... He makes it acceptable [for students] to be interested in science and how it influences their lives, which is very important to attract future scientists." A colleague commented on how "Mark has the remarkable ability to teach lessons in a manner that benefits learner of all ability levels......[he] strives to make his labs inquiry-based, and always encourages his students to apply what they are learning to local, as well as global issues".

In addition to his formal classroom duties, Mark serves as the advisor to the Ski Club. An advocate for active lifestyles, he has been working to get a skate park built in the city of Mason. He is an Eagle Scout who continues to volunteer for the BSA. His sense of fun and his enthusiasm for his work is summed up in his teaching philosophy, "My personal teaching philosophy can be summed up in three words: IT'S ALL GOOD. This is obviously open to interpretation. I go about my occupation not as a 'job', but as an opportunity. I've been educating, acting, laughing, and having a BLAST for over nine years now. I don't consider it 'work', per se. Work can't be this fun... or rewarding. Everyday is a new experience. My primary audience consists of eager minds with infinite questions. Humor is the backbone of my teaching style and delivery. I embarrass myself at any cost. ANYTHING to get kids interested in science. Teaching is all about performing for your students. In the middle of some (Continued on page 10)

#### 2006 High School Teacher of the Year

The Awards Committee of the Cincinnati Section is pleased to announce that Robert Gorey has been named High School Chemistry Teacher of the Year. Bob began teaching in 1967. The past 32 years have been at Summit Country Day School. During the Vietnam War Era, he served in the Air Force where he was stationed at Plattsburgh Air Force Base in



upstate New York. Because at that time teaching was a "critical" occupation, the Air Force released him early to start teaching at Our Lady of the Angels in St. Bernard. Bob has received numerous awards for his professional accomplishments. He received the 2001 Schilderink Faculty Chair award for outstanding teaching. He was also recognized by the Ohio House for his contributions to education throughout his teaching career. A similar commendation was received from the Kentucky Senate. The Governor of Kentucky made him a Kentucky Colonel for his many years of dedication to his students and their development.

Bob has taught every science course offered in the curriculum at Summit Country Day School with the exception of physics. A colleague writes, "Bob's working philosophy has been 'I am here to serve. Put me where I am needed.' This year he teaches three sections of chemistry and one of anatomy & physiology. Bob is known for his hard work, spending hours after school to help students with special needs learn science. Another colleague writes "I have spent 42 years in this profession and observed hundreds of teachers in the four schools where I have served and Bob Gorev is clearly and demonstrably one of the finest instructors and student mentors I have known." Bob's approach to mentoring includes establishing a lasting relationship with his students. For 27 years he coordinated the Adventurer Club. Organizing 182 weekends involving over 4800 students and 780 chaperones, students spanning two generations had the opportunity to travel to 20 states, Canada, and Ireland. The focus of these trips included biology, ancient ar-(Continued on page 10)

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# Methods Development, Validation Procedures and Regulatory Compliance Issues for the Pharmaceutical and Related Industries

Shib Mookherjea (Val Qual International, Inc), Instructor

Monday and Tuesday, May 8-9, 2006 Health Care Research Center – The Procter & Gamble Company

8700 Mason-Montgomery Road, Mason Ohio

The course introduces a unique, unconventional, generic, and grassroots approach to validation in general, and development and optimization of analytical methodology in particular. The course prepares the attendees for managing regulatory and other compliance issues.

#### Who Should Attend

Scientists, managers, and technicians involved in methods development and optimization, analytical research and development, meeting FDA requirements and regulations, validating analytical methods, application of newer analytical methods, and those involved in quality control, quality assurance, and quality assessment.

#### Key Topics you'll learn about

- Quality control and quality assurance.
- Validation parameters and definitions.
- Highlights of the guidelines derived from international standards-ISO 9000 and ISO 17025, GLP, GMP, etc.
- Conformity assessment—what it is, how it is applied.
- Analytical method optimization during development.

- Case studies in the improvement of validation characteristics.
- Data integrity and statistical evaluation of analytical data.
- Method development and optimization in HPLC and wet chemistry.
- ICH, AOAC, and USP guidelines for methods validation and other standards.
- Regulatory submission packages for IND, NDA, ANDA and other phases of development.

#### **About the Instructor**

Shib Mookherjea is a globally acclaimed speaker and consultant. During the past 25 years, he has held management positions in the R&D area with Johnson and Johnson, Colgate-Palmolive, BASF, and Troy Corporation. He is a recognized expert in the fields of validation, QA, and QC in both the pharmaceutical and process industries.

#### Program Agenda

Check-in will begin at 8:30 AM the first day. The course will be taught from 8:45 AM to 5:15 PM for two consecutive days. If you have technical questions about the course, contact Dr. Mookherjea at <a href="mailto:val-qual@aol.com">val-qual@aol.com</a> or by telephone at (201) 615-6346.

### Fundamentals: Quality, Quality Control, and Quality Assurance

- General discussions on quality, QC, QA, and guidance from domestic and international standards
- Definitions and descriptions of validation parameters
- Principles of method validation, conformity assessment and laboratory QA

### Method Validation: Guidelines Derived from GLP, AOAC, ISO 9000, and ICH

- Examples of development and optimization of methods *ab initio* and development of validation criteria
- Definition of ruggedness, reproducibility, system suitability, precision, accuracy, LOD, LOQ and other validation parameters for FDA compliance

### Method Development and Optimization by Example and Case Studies

• How to systematically develop and optimize an assay for a trace component in a very complex sample

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# Method Development and Optimization in HPLC as an Example of a Current Analytical Techniques

- Aspects of HPLC that need to be developed, and optimized, including procedures
- Peak purity, spectral match, peak tailing and other considerations in HPLC

# Methods Optimization Considerations in Spectroscopic (UV-VIS, AA) and Classical Techniques

• Statistical Treatment of Data: Practical examples and case studies

Statistical Treatment of Analytical Data-Mean, Mode, Standard Deviation, Control Charts, etc. Statistical Process Control (SPC) Applications for Process Improvement and Process Optimization

#### **Cost:**

The course fee will be \$600 for ACS members and \$700 for non-members (compare to \$1145 at a National ACS meeting). The fee includes course materials, continental breakfast and refreshment breaks for both days. Seating will be limited. Please call Rick White at 513-622-1624 and leave a voice mail with your name, affiliation, and phone number to reserve your seat today. Payment can be made by sending check or money order, payable to "Cincinnati Section ACS", to the address listed below, or you may pay by credit card at the CINTACS website (http://www.che.uc.edu/acs).

#### D. Rick White

The Procter & Gamble Co. Health Care Research Center, Box 705 8700 Mason-Montgomery Rd. Mason, OH 45040

The last date to register is Friday, April 28.

# Profiles in Chemistry "Molecular Weight"



Stanislao Cannizzaro (1826-1910) Professor at Alessandria (1851-1854), Genoa (1855-1859), Palermo (1860-1869) and Rome (1870-1910), Cannizzaro is best known for his discovery of the Cannizzaro reaction in organic chemistry for the conversion of aromatic aldehydes into the corresponding acids and alcohols, and his successful resolution of the atomic weight problem. Though Dalton had introduced the idea of extracting atomic weights from combining weights in 1803, he was unable to do this in a completely unambiguous fashion and, as a result, 50 years of chaos followed during which chemists used a variety of competing atomic and equivalent weight values. In 1858 Cannizzaro published a small pamphlet in which he reasserted Avogadro's earlier hypothesis (1811) that gas densities at equal pressures were directly proportional to molecular weights. Whereas Avogadro had attempted to extract atomic weights from the resulting molecular weights by using the stoichiometries of gas reactions - a procedure that could be applied only to a few elements - Cannizzaro showed how this same information could be extracted by using the gravimetric composition of an element's volatile compounds - a procedure that was virtually universal. With Cannizzaro's advance, chemists finally acquired a standard set of atomic weights and were able to determine unambiguous and universally accepted compositional formulas for their compounds.

Courtesy of Professor William Jensen, Oesper Chair of the History of Chemistry and Chemical Education, University of Cincinnati and MeasureNet Technology Ltd. For more information, e-mail noteablechemists@measurenet-tech.com

#### Hans and Marlies Zimmer International Scholar

#### Professor Peter Sadler April 24-28, 2006

The Department of Chemistry at the University of Cincinnati is very pleased to present the fourth series of lecturevisits by international scholars actively engaged in areas of frontier chemical research.



The 4<sup>th</sup> scholar in this series is Professor Peter J. Sadler, Crum Brown

Professor of Chemistry at the University of Edinburgh, Scotland. Professor Sadler received his B.A. in 1969 and M.A., D.Phil. in 1972 at the University of Oxford. He is the recipient of the Royal Society of Chemistry Award for Inorganic Biochemistry, the Dwyer Medal from the University of New South Wales Australia and is a Fellow of the Royal Society of Edinburgh. For more information on Professor Sadler, please visit his website: <a href="http://www.chem.ed.ac.uk/staff/pjsadler.html">http://www.chem.ed.ac.uk/staff/pjsadler.html</a>

His research interests focus on metals in biology and medicine, the design and mechanism of action of metallodrugs, especially the role of proteins in metal-induced signal transduction. His group has recently identified for the first time the major zinc binding site on human albumin, characterised the first multinuclear form of a transferrin protein, a new class of bacterial proteins involved in zinc resistance containing a novel zinc-finger in a zinc-cluster, a novel copper site in a bacterial copper chaperone, and has proposed a new mode of interaction of metallated anti-HIV macrocycles with the CXCR4 receptor. His work involves close collaboration with biologists, clinicians, and industry.

Members of the scientific community, faculty and students are invited to attend his presentations and banquet.

#### **Schedule of Activities**

Monday 4 PM, 502 Rieveschl, Biological Sciences Colloquium "Genetic Codes for the Periodic Table: Proteins as Therapeutic Targets for Metals."

M W F, 10:00-10:50 AM, Short course on "Inorganic Chemistry and Medicine." [while the short course is free of charge, interested individuals should register with Kim Carey at <a href="mailto:kim.carey@uc.edu">kim.carey@uc.edu</a> or 513-556-0293 so that appropriate arrangements can be made.]

Thursday, 12:30 PM "**Organometallic and Photoactivated Metal Anticancer Complexes.**" (room to be announced; for updates please check the web: <a href="http://www.che.uc.edu/news/seminars.html">http://www.che.uc.edu/news/seminars.html</a>)

Friday, April 28, 4:00 PM, 502 Rieveschl, "The Elements of Life and Medicines: A Web of Health."

#### Abstract

There are 81 stable elements on Earth. The internet offers most of these in mineral supplements – but are they all essential for life? Is there a code in the human genome for each of the essential elements? and if so what kind of code is it? I will take a journey through the periodic table and attempt to identify essential elements and their codes, and emphasize that even non-essential elements (including radioactive ones) can be used in the design of therapeutic and diagnostic agents. I shall illustrate how the chemistry of metals in particular can be controlled by their oxidation states and the types and numbers of bound ligands. Inorganic chemistry has much to offer the discovery of truly novel medicines and the understanding of diseases that are currently intractable. To know chemistry, is to know life!

#### Reception and Banquet Friday, April 28, 2006, UC Faculty Club

5:30 p.m. Reception following seminar

6:30 Dinner

7:30 Zimmer Program and Awards

Deadline for reservations is Tuesday, April 25, 2006. To make a reservation, go to:

<u>http://www.che.uc.edu/kim/alumni/Zimmer/zimmerindex.htm</u>

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#### Menu Choices:

- Chicken Dijon with Pecans
- Lemon Baked Cod
- Vegetarian option: Portobello mushroom with angel hair pasta primavera

All entrees are served with a salad, chef's selection of vegetable and potato, pasta or rice, dinner rolls, dessert, and one alcoholic beverage. \$30 (\$15 students)

# Dr. Rudolf G. K. Strobel Distinguished Scientist of the Year

Congratulations to ACS Local Section member Rudolf Strobel (P&G retired) who was recently selected by the Engineers and Scientists of Greater Cincinnati as the Distinguished Scientist of the Year. The Award was presented by the ESC at a banquet on February 23, 2006 at the Great American Ball Park. Rudy is well known by fellow P&Gers through his extensive research on coffee and other foodstuffs and for his past studies on carbohydrate chemistry and on mold metabolites.

#### "Second Career" Chemical Education Scholarships Available

The Hach Scientific Foundation is offering second career chemical education scholarships to chemists. Scholarship money is available for second career chemistry teachers! The Hach Scientific Foundation is a private multi-million dollar foundation dedicated to chemistry and chemical education. The Hach Scientific Foundation is providing scholarships across the country to chemists interested in pursuing a Masters in education and teachers certificate. For more information, visit:

 $\underline{\text{http://www.hachscientificfoundation.org/}}\\ teachers.shtml$ 

#### Update on Section Bylaws Revision

The Committee on Constitution and Bylaws of the ACS, acting for the Council, issued new certified bylaws to 4 local sections including the Cincinnati Section. The new bylaws can be found on the Section's web site.

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abstract lecture on any given topic, I stop...dead in my tracks. Time stands still....I see EVERY student's eyes transfixed on EVERY word out of my mouth. They're waiting for the next word. Their faces say it all. "I want to learn...." Nothing beats that. Like I mentioned before; It's all good. "

Congratulations Mark on this well deserved recognition!

# Oliver Appointed Committee Chair

The Cincinnati Section's Bill Oliver (Professor of Chemistry at Northern Kentucky University and Councilor for the Section) has been appointed Chair of The Committee on Science by the American Chemical Society effective Jan. 1, 2006.

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cheology, skiing, hiking, fossil collecting, caving, biking, and gems and minerals. One of his supporters writes "His current students; those who return to reminisce;......all embrace this wonderful teacher because they learned from him-be it biology or chemistry or anatomy or travel-that they were important, capable, and cared for by this special teacher and friend".

Robert is married (wife Susan, whom he met at age 7, is an outstanding veteran 2<sup>nd</sup> grade teacher in the Cincinnati Public Schools). He has two sons, Chris and Joe, who live in Cincinnati.

Congratulations, Bob, on this well deserved recognition!

# Information for Chemical Educators

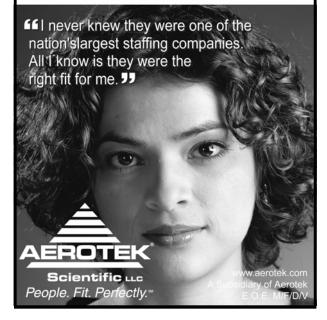
The Biennial Conference on Chemical Education (BCCE) will be held at Purdue University in West Lafayette, Indiana from July 30 to August 3. It is a wonderful conference that brings educators from high schools, colleges, and universities together to share activities, strategies, and relevant content in the teaching of chemistry. Visit the website at <a href="www.chem.purdue.edu/bcce/">www.chem.purdue.edu/bcce/</a>. Registration opens in mid-April. If you are interested in carpooling to the conference, contact Linda Ford at <a href="Linda.ford@7hills.org">Linda.ford@7hills.org</a>. She will try to coordinate that transportation option.

The chemical educators' discussion group is looking for three host sites for the 2006-07 school year as well as new program ideas. Please contact Linda to show your interest in hosting a meeting and to make programming suggestions.

The final piece of information involves the regional ACS meeting to be hosted by the section in Cincinnati in May 2007. Linda is bringing together a committee of educators to plan a workshop for educators on Sunday, May 20, 2007. Please e-mail Linda to convey your interest in serving on that planning committee. Linda will convene that committee during this month.

We specialize in recruiting and placing professionals for contract employment, direct placement, and contract-to-hire positions across the complete scientific and clinical research spectrum including: Clinical Research Associates, Clinical Data Managers, Clinical Data Coordinators, Research Scientists, Regulatory Specialists, Medical Writers, & more.

For more information, contact Michelle Davin (513) 229-2078 or Emily Shafer (513)229-2030



# Chemical Information Update – Changing the Scientific Publication Process

Edlyn S. Simmons, Chair, Chemical Information Discussion Group

The time honored procedures for scientific publication are under attack. There are suggestions that publishing companies and printed journals are no longer needed and that access to the scientific literature should be free. The Open Access movement is growing, but traditional scientific journals are still publishing most chemical research. What's going on here?

The tradition of peer review of scientific journal submission grew up as a safeguard against the publication of unsound scientific research. We're all aware of the procedures. Authors of an article submit their manuscript to the publisher of a scientific journal. The editor of the journal sends the manuscript to reputable scientists in the same field for review. These referees evaluate the science in the manuscript and suggest changes in the text and cited references, sometimes suggesting that additional research be done before the manuscript is published. The editor either agrees to publish the article, asks for changes, or rejects the article outright. The authors either rejoice, revise the manuscript and resubmit it, or send it along to a less prestigious journal. If the manuscript is accepted, the authors are usually asked to assign copyright to the publisher. These procedures protect against publishing of most "junk science", but they do allow leeway for ethical lapses by referees. An unethical referee can block publication by rivals; a larcenous referee can borrow ideas from the author's research.

There are costs at every stage of publication. Some journals assess page charges to have the article published. In the absence of page charges there may be a charge for having figures printed in color. The authors can order reprints of their article to distribute as a courtesy, and the journal may or may not give them a limited number of those copies at no cost. The ACS policy is to give the authors a DOI (Digital Object Identifier) that can be used for 50 free downloads of the article; other publishers

send packets of reprints by snail mail. The published journal is sold by subscription and copyright clearance fees are charged for reprints of articles ordered directly or indirectly from the publisher. With the rise of electronic publishing, most scientific journal publishers have instituted additional charges for electronic subscriptions to journals. Publishers, particularly those without ties to scientific societies, have been increasing subscription costs at a time when academic and corporate library budgets are being cut. Publishers profit from every stage of the publication process while restricting the authors' rights to their own research.

Some scientists and librarians are suggesting that scientific publishers are no longer needed. University websites can act as repositories of faculty research reports, which is often forbidden when journal publishers insist on assignment of copyright. Research published without peer review is suspect - the Chemistry Preprint Server, which once posted unrefereed articles on the Web, was never able to attract many high quality articles, In some scientific disciplines posting articles on an internet server is routine. arXiv.org is an e-print archive for articles in the fields of mathematics, physics, computer science, and quantitative biology. Now housed at Cornell University, arXiv.org has over 358,000 e-prints, and the cost of keeping the archive alive is borne by the university. Comments by readers are published, turning the open publication of the article into open peer review. The Public Library of Science is intended as an alternative publication venue (CINTACS, March 2003). PLoS charges the authors for the entire cost of publishing the article electronically and archiving all submissions. Librarians are beginning to discontinue subscriptions to high priced journals. Faculties at some universities are refusing to publish in high profit journals. New open access journals are being introduced. And some of the journal publishers are responding by reducing the cost of accessing their archives or making them freely available to the public a short time after publication. More about open access journals in future columns.

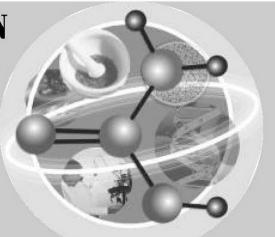
Footnote: This year, the Chemical Information Discussion Group is offering hints and updates on chemical information resources available to most chemists

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# 2006 EASTERN ANALYTICAL SYMPOSIUM Call for Papers

**November 13-16, 2006**Garden State Exhibit Center Somerset, NJ

Deadline - April 15, 2006



#### Celebrating the Diversity of Science

The Eastern Analytical Symposium is the second largest meeting in the United States dedicated to the needs of analytical chemists and those in the allied sciences. Please help us to make the 2006 EAS the best ever-be a part of the program by contributing your own papers for inclusion in the oral or poster sessions.

We invite you to submit a contributed presentation for the 2006 EAS Technical Program. Please submit abstracts through our web site at www.eas.org, after March 1, and follow the instructions for preliminary abstract submission. **Invited speakers should not submit preliminary abstracts to EAS, although your session organizer may request one for his/her use.** All preliminary abstracts must be submitted electronically via the EAS web site at www.eas.org. The abstract submission deadline is April 15, 2006. Please visit our web site for a list of session topic areas.

Please carefully review the following information:

- All preliminary contributed abstracts will be submitted electronically in 2006. No faxed, e-mailed, or mailed preliminary abstracts will be accepted.
- 2. The title of the presentation and the list of authors that you submit are final, and may not be changed.
- 3. The preliminary abstract that you submit will be considered to be your final abstract for use in the abstract book for the 2006 Eastern Analytical Symposium.
- 4. All preliminary abstracts will be acknowledged via e-mail.
- Presenting authors of contributed submissions will be notified in June 2006 of the status of the abstract and its session assignment.

For information on the technical program at the 2006 EAS, please contact:

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# Section Meeting Sponsors, 2005-6 Program Year

YourEncore, Inc has offered to sponsor the May 19th Party Night, completing our sponsorship list for the present year of 5 local industries and 2 universities. Based in Indianapolis, with an office in Blue Ash, YourEncore is involved with matching predominately retired scientists and engineers into part-time assignments with member companies.

The Cincinnati Section is grateful to these organizations for their generous support of our monthly meetings through these Sponsorships.

Recall that Sponsorship entails a contribution of at least \$1000 cash or an "in kind" contribution of the same amount of goods and services required to deliver the many aspects of a monthly meeting. Meeting expenses include

Social Hour, meeting room, audio/visual equipment, student and guest meals, and miscellaneous speaker expenses. The sponsors' contributions turn loose funds that we can use to provide better speakers, which leads to better attendance and more value to attendees.

The meetings and Sponsors are shown below:

September 18 No Sponsor Solicited October 14 UC Chemistry department

November No Meeting
December 7 Xavier University
January 18 Givaudan Flavors

February 15 The Procter and Gamble Company March 15 Advanced Testing Laboratory

April 19 Girindus America Inc. May YourEncore, Inc.

We encourage Section members to introduce themselves to Sponsor representatives at each meeting, and to express our genuine thanks for their generosity,

Ted J. Logan, Chair Sponsorship & Solicitation Committee





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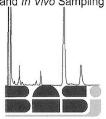
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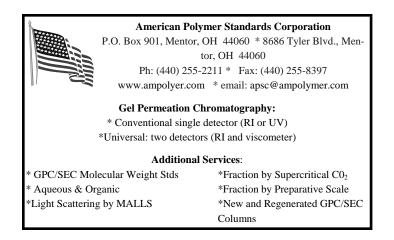
and techniques for using them. Feedback, contributions, and requests for information you'd like to see in future columns are welcome. If you have any comments, suggestions, or contributions, please email them to simmons.es@pg.com

# The ACS Central Regional Meeting

CERMACS 2007 is coming to Cincinnati *May* 20-23, 2007! Volunteers are needed in all areas, including several committee chairs, committee members for most committees and volunteers as needs arise. Also, consider contributing a talk or poster when the call for papers is issued later this year. Contribute and participate!

See: www.cermacs2007.org for more details, or contact the general chair for the regional meeting, Joe Caruso, at:

joseph.caruso@uc.edu



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